

WE CLAIM:

1. An information distribution system delivering digital program information over a large geographic area wherein the digital program information provides different
5 broadcast quality television programming to a plurality of remote locations within the large geographic area, the system comprising:

a network operation center creating a national program feed and information components that are multiplexed to create a digital streaming media;

a broadcast quality multi-window screen display at the remote location, the multi-
10 window display comprising a plurality of different programming in each of the multi-window screens, wherein at least a portion of the different programming is carried by the digital streaming media from the network operation center and comprises at least a national program feed;

a graphical user interface accessing a software control process at the network
15 operation center for controlling through the digital streaming media the assembly of the multi-window screen display;

a distribution system transmitting the digital streaming media to a plurality of remote locations; and

a plurality of remote nodes receiving the digital streaming media at the plurality
20 of remote locations wherein the digital streaming media is used to produce the multi-window display at the remote node.

2. The invention of claim 2 wherein the remote nodes use the digital streaming media and locally provided information from sources at the remote node location to
25 produce customized programming with local content.

3. The invention of claims 1 wherein the digital streaming media is transmitted to the plurality of remote nodes using an encapsulated Internet Protocol (IP) with IP encryption techniques.

30

4. The invention of claim 3 wherein the encapsulated IP with IP encryption distributes the digital streaming media to remote nodes configured in a serial network configuration.

5 5. The invention of claim 1 wherein the digital streaming media carries MPEG-2 compressed digital video.

10 6. The invention of claim 3 wherein the encapsulated IP with IP encryption distributes the digital streaming media to remote nodes configured in a point to multi-point network configuration.

7. The invention of claim 1 wherein the information distribution system transmits weather information television programming.

15 8. The invention of claim 1 the network operation center further comprising:
an audio concatenation engine producing audio narration that is transmitted to the remote nodes by the digital streaming media.

20 9. The invention of claim 1 wherein the audio concatenation engine produced audio narration describing local weather conditions and forecasts.

25 10. An information distribution system delivering digital program information over a large geographic area wherein the digital program information provides customized programming to a plurality of remote locations within the large geographic area, the system comprising:

a network operation center creating a national program feed and information components that are multiplexed to create a digital streaming media;

a broadcast quality multi-window television display at the remote location, the multi-window display comprising a plurality of different programming in each of the

multi-window screens, wherein at least a portion of the different programming is carried by the digital streaming media from the network operation center and comprises at least a national program feed;

an application software process to create audio narrations by assembling audio narrations from a stored format without requiring a live, on-air announcer to produce the narration;

a distribution system transmitting the digital streaming media to a plurality of remote locations;

a plurality of remote nodes receiving the digital streaming media at the plurality of remote locations wherein the digital streaming media is used to produce the multi-window display at the remote node;

locally provided information relevant to the remote location where a remote node is located, wherein the locally provided information is utilized by the remote node for programming in at least one of the multi-windows.

11. The system of claim 10 wherein the locally provided information includes weather data from the remote location to implement a local weather information graphic in one of the multi-windows.

12. The system of claim 10 wherein the insertion of the locally provided information is created into program material under the control of the network operation center through the digital streaming media.

13. An interactive information distribution system delivering digital interactive streaming media over a large geographic area wherein the digital interactive streaming media provides different broadcast quality interactive programming to plurality of remote locations within the geographic areas, comprising:

a network operations center creating national programming and multiplexing interactive programming to create a digital interactive streaming media;

a set top application system to develop the interactive programming to be displayed to viewers, wherein the interactive programming is carried by the digital streaming media and enables viewer to select displayed items for purchase;

5 a distribution system transmitting the digital interactive streaming media to the plurality of remote locations; and

a return network to communication transactional information from the remote location to provide interactive programming capability.

10 14. The invention of claim 13 wherein the interactive programming offers services for purchase from commercial providers.